

FIG. 1

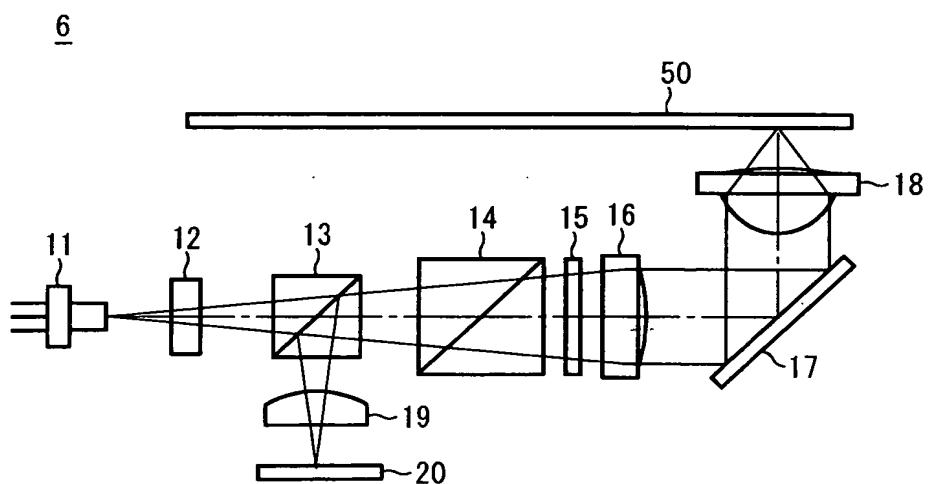


FIG. 2

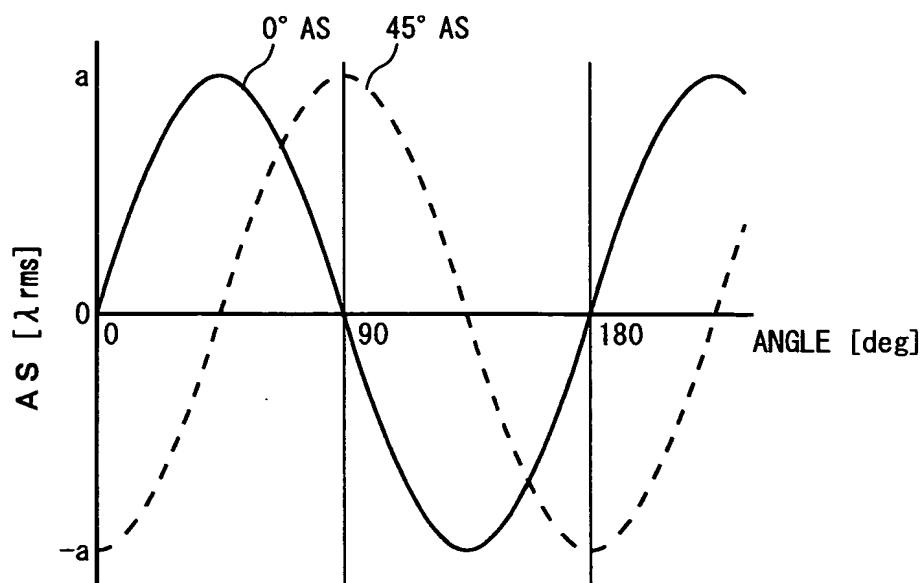


FIG. 3

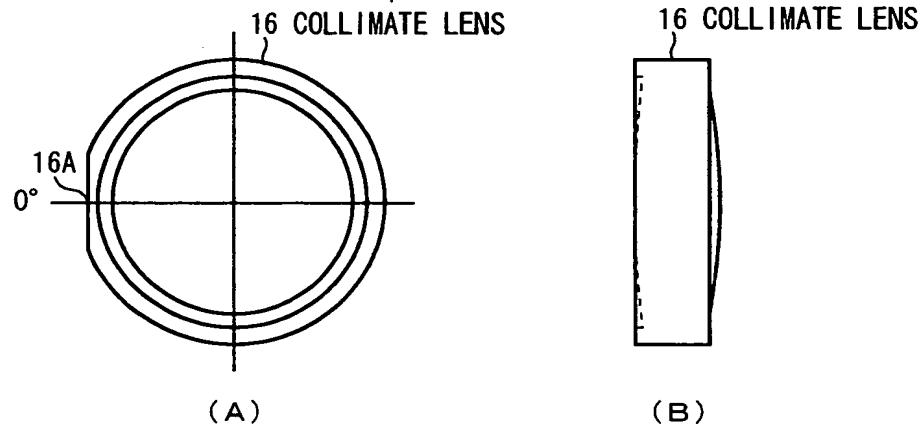


FIG. 4

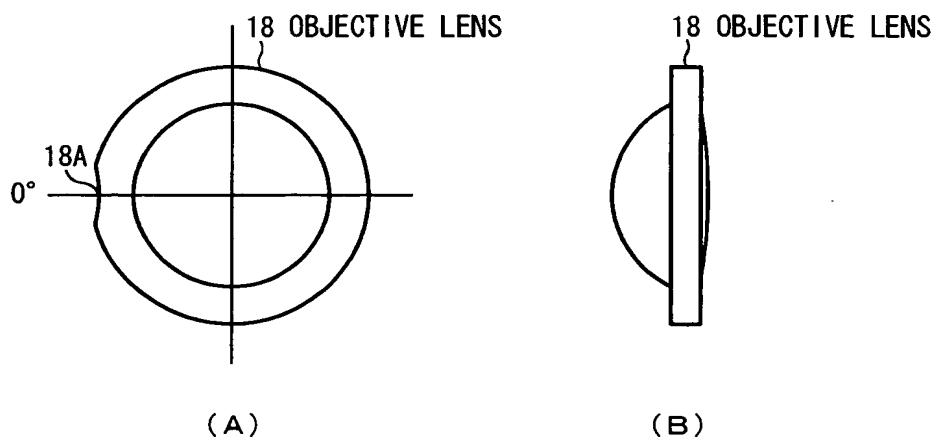


FIG. 5

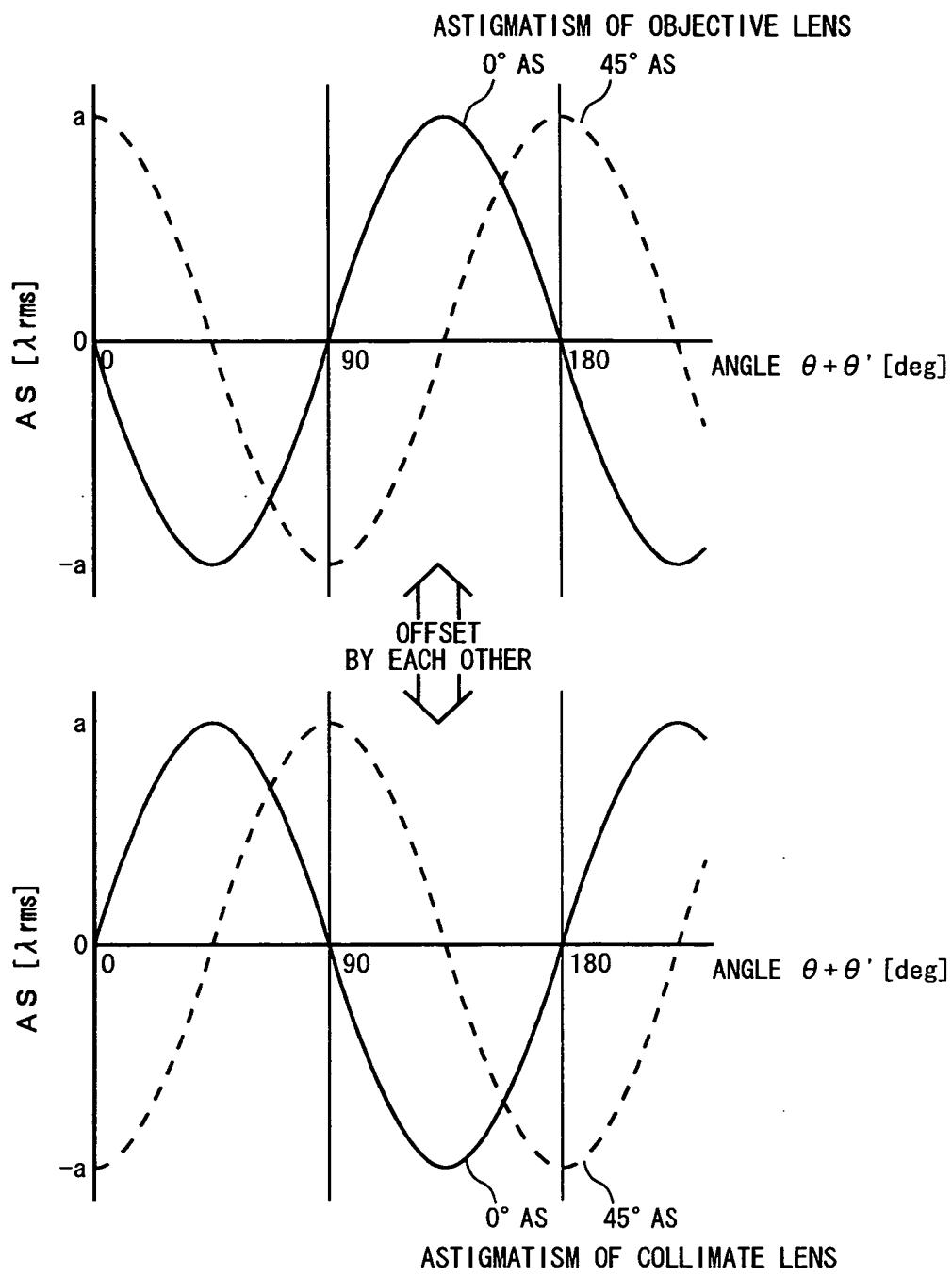


FIG. 6

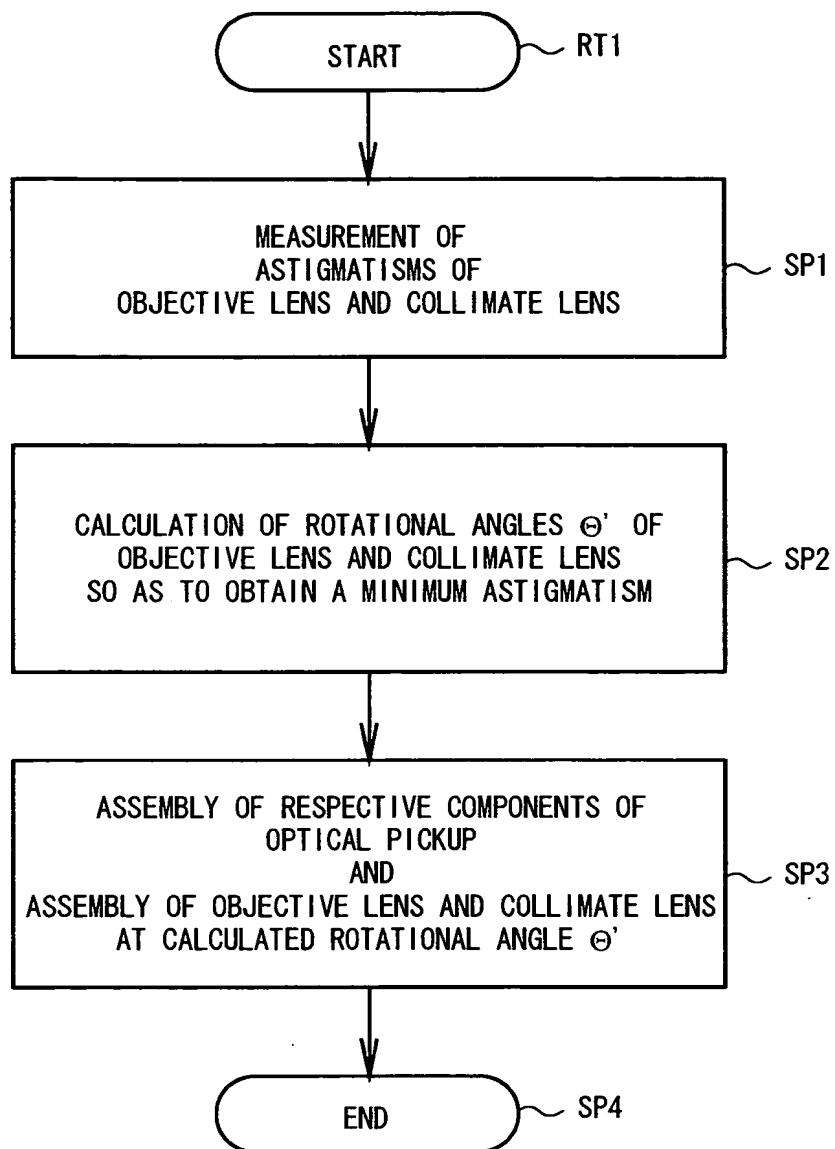


FIG. 7

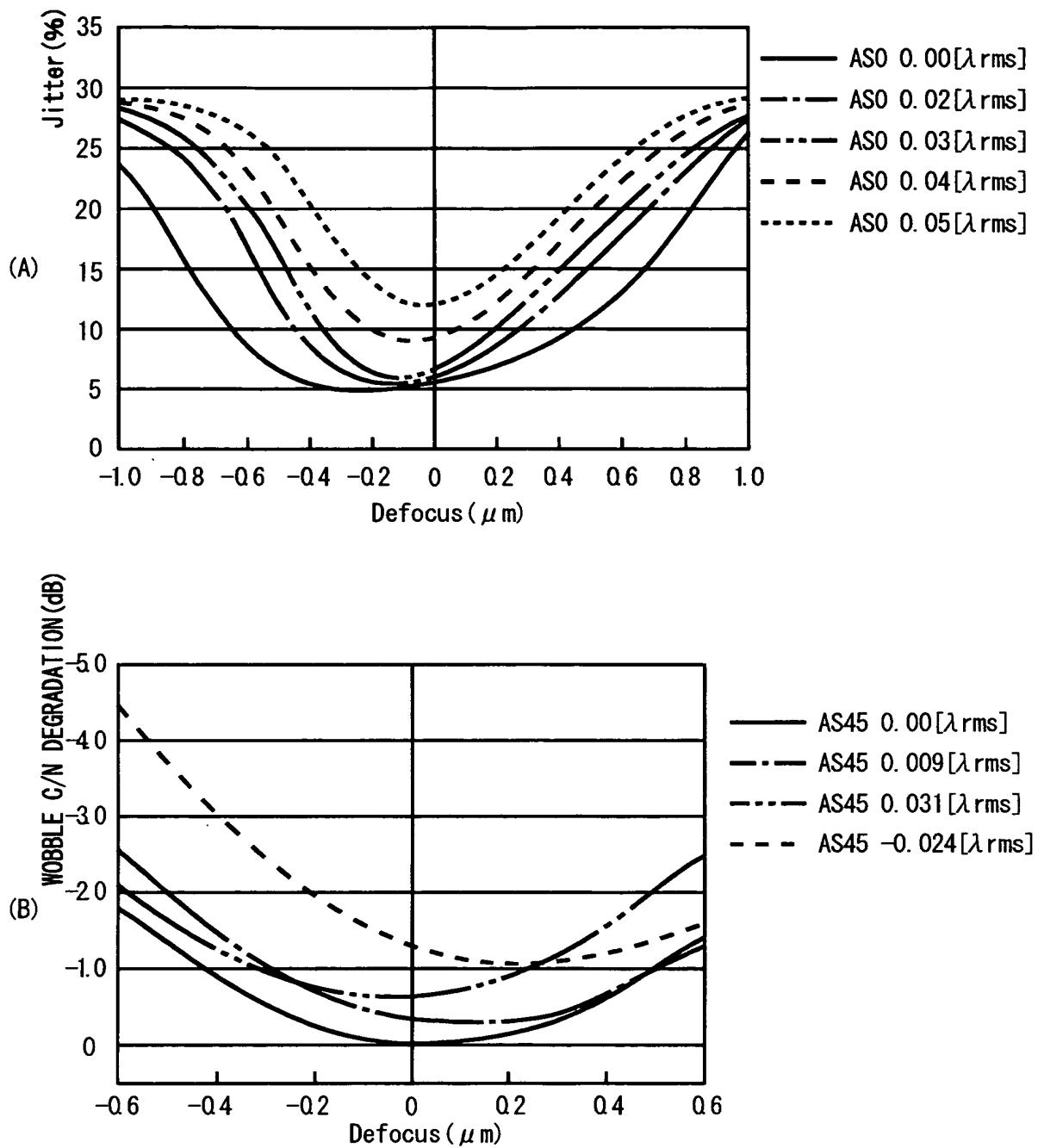


FIG. 8

	WITH ASTIGMATISM OFFSET		WITHOUT ASTIGMATISM OFFSET	
	0AS	45AS	0AS	45AS
average	-0.2	0.1	0.0	0.0
$\sigma$	11.3	11.7	9.1	7.8
ave+3 $\sigma$	33.9	35.2	27.4	23.4
ave-3 $\sigma$	-34.2	-35.0	-27.4	-23.4

[ $\lambda$  rms]

FIG. 9

#### DESCRIPTION OF SYMBOLS

1 ..... OPTICAL DISK APPARATUS, 2 ..... CONTROL SECTION, 3 ..... SERVO CIRCUIT,  
4 ..... SPINDLE MOTOR, 5 ..... FEED MOTOR, 6 ..... OPTICAL PICKUP,  
7 ..... SIGNAL PROCESSING SECTION, 11..... LASER DIODE, 12 ..... GRATING,  
13 ..... DEFLECTED BEAM SPLITTER, 14 ..... BEAM SPLITTER, 15 ..... WAVELENGTH PLATE,  
16 ..... COLLIMATE LENS, 17 ..... ERECTING MIRROR, 18 ..... OBJECTIVE LENS,  
19 ..... LIGHT-GATHERING LENS, 20 ..... PHOTO DETECTOR, 50 ..... OPTICAL DISK